SEQUENCE LISTING

- (1) GENERAL INFORMATION:
 - (i) APPLICANT: CHEN, ZHIJIAN J.
 - (ii) TITLE OF INVENTION: A KINASE CAPABLE OF SITE-SPECIFIC PHOSPHORYLATION OF IKB α
 - (iii) NUMBER OF SEQUENCES: 8
 - (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
 - (B) STREET: 1100 NEW YORK AVENUE, SUITE 600
 - (C) CITY: WASHINGTON
 - (D) STATE: DC
 - (E) COUNTRY: US
 - (F) ZIP: 20005-3934
 - (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
 - (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/825,559
 - (B) FILING DATE: 19-MAR-1997
 - (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER: 08/616,499
 - (B) FILING DATE: 19-MAR-1996
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: BROWN, ANNE
 - (B) REGISTRATION NUMBER: 36,463
 - (C) REFERENCE/DOCKET NUMBER: 1448.0240001
 - (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (202) 371-2600
 - (B) TELEFAX: (202) 371-2540
- (2) INFORMATION FOR SEQ ID NO:1:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 36 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: cDNA
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

TTGTGACCTC AGGATATCGA GAGCAATACT TCCATT

(2) INFORMATION FOR SEQ ID NO:2:

35

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 35 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

TTGTGACCTC AGGATATCGA GAGAAATACT TCCAT

(2) INFORMATION FOR SEQ ID NO:3:

- - (i) SEQUENCE CHARACTERISTICS:(A) LENGTH: 7 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: not relevant
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: peptide
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 5
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Xaa Tyr Val Glu Xaa Glu Arg

- (2) INFORMATION FOR SEQ ID NO:4:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 13 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: not relevant
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 2
 - (D) OTHER INFORMATION: /note= "CAN BE GLN OR LYS"

- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 5
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 8
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 9
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
- (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 11
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Xaa Xaa Glu Val Xaa Glu Thr Xaa Xaa Ser Xaa Glu Lys 1 5 10

- (2) INFORMATION FOR SEQ ID NO:5:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 9 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: not relevant
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
 - (ix) FEATURE:
 - (A) NAME/KEY: Modified-site
 - (B) LOCATION: 7
 - (D) OTHER INFORMATION: /note= "CAN BE LEU OR ILE"
 - (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

Xaa Phe Thr Thr Met Glu Xaa Met Arg 1 5

- (2) INFORMATION FOR SEQ ID NO:6:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: not relevant
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: peptide

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(xi)	SEQUENCE	DESCRIPTION:	SEQ	ΙD	NO:6:
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Thr Tyr His Ala Leu Ser Asn Leu Pro Lys

"(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 404 base pairs
 (B) TYPE: nucleic acid

 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA (genomic)

(xi)	SEQUENCE	DESCRIPTION:	SEQ	ID	NO:7:	
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GGGTGACGAG	TGGTGGCCGA	AGCAGGGGGA	CAGCAAGGGA	CGCTCAGGCG	GGGACCATGG	60
CGGACGGCGG	CTCGGAGCGG	GCTGACGGGC	GCATCGTCAA	GATGGAGGTG	GACTACAGCG	120
CCACGGTGGA	TCAGCGCCTA	CCCGAGTGTG	CGAAGTATGC	CAAGGAAGGA	AGACTTCAAG	180
AAGTCATTGA	AACCCTTCTC	TCTCTGGAAA	AGCAGACTCG	TACTGCTTCC	GATATGGTAT	240
CGACATCCCG	TATCTTAGTT	GCAGTAGTGA	AGNTGTĞCTA	TGAGGCTAAA	GAATGGGATT	300
TACTTAATTA	TATTATAAAA	TGCTTTTTGT	CCAAAAGGCG	GAGTCAAGTT	AAAAACAAGC	360
TAGTTGACAA	AAAATGGATT	NAACAGTTGC	TGTNACTTAT	TGTT		404

- (2) INFORMATION FOR SEQ ID NO:8:
 - (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
 - (ii) MOLECULE TYPE: DNA (genomic)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

ATACCAAGAG	GTACCAGGAA	GCATTGCATT	TGGGTTCTCA	GCTGCTGCGG	GAGTTGAAAA	60
AGATGGACGA	CAAAGCTCTT	TTGGTGGAAG	TACAGCTTTT	AGAAAGCAAA	ACATACCATG	120
CCCTGAGCAA	CCTGCCGAAA	GCCCGAGCTG	CCTTAACTTC	TTCTCGAACC	ACAGCAAATG	180
CCATCTACTG	CCCCCTAAAT	TGCAGGCCAC	CTTGGACATG	CAGTCGGGTA	TTATCCATGC	240
AGCAGAAGAG	AAGGCTTGAA	ACTCGTACTC	ATACTTCTAT	GAGGCATTTA	GGGTATGACT	300
CATCGACAGC	CCAAGGCATC	ACA				323